# CENTER FOR HARSH ENVIRONMENT ELECTRONICS

### CENTER

The Center for Harsh Environmental Electronics (CHEE) (formerly the Center for Flat Panel Displays) was established in 1995 to develop micro-miniature thermionic vacuum emitter (MTV) display panels. As the MTV technology has matured and initial option to license agreements were signed, the Center has moved its focus to electronic circuits and devices for operation in high temperature operating environments.

#### **TECHNOLOGY**

Harsh Environment Electronics is focused on the development of harsh environment electronics systems such as gallium arsenide-based electronics that operate at high temperatures, MTV electronics, and electrical converters. CHEE also provides services in the following areas: prototype development and testing; development of high-temperature electronics based on MTV electronics technology; development of tools to test and evaluate flat panel display technologies; and work with industry (especially businesses located in Utah) in addressing and supporting their flat panel display technology needs. An enhanced flat panel display has been patented. A new company has been established with an option to license the flat panel display technology.

# **ACCOMPLISHMENTS**

CHEE continues to develop strategic business partners for various implementations of the MTV technology. A strong intellectual property portfolio is being developed and will provide significant opportunities for corporate licensing of a wide variety of product implementations in the future. Currently one patent has been issued, one is pending and 15 additional patents are in preparation. A new company has been established with an option to license the flat panel display technology.

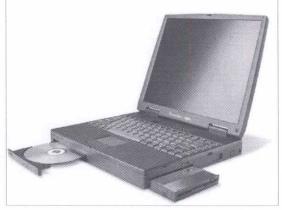
## CONTACT

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# Can You Imagine ...

. . . a new class of flat panel displays, brighter and with greater resolution than current displays, using microminiature vacuum tube emitters and manufactured much like silicon microprocessors?

THE CENTER EXPLORES ELECTRONIC CIRCUITRY THAT WILL OPERATE RELIABLY IN EXTREME HIGH TEMPERATURE ENVIRONMENTS.



The demand for flat panel displays, in laptops like this one, and in many other applications, represents an immense commercial opportunity for the center.